BACtrack® Vio™

Smartphone Breathalyzer

User Manual

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This device is intended to measure alcohol in human breath. Measurements obtained by this device are used in the diagnosis of alcohol intoxication.

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Track your B.A.C - BACtrack!

INTRODUCTION

Your BACtrack Vio is a personal alcohol screening device used for the detection of alcohol in the breath. It uses an MicroCheck™ Sensor Technology to analyze your breath, then transmits this reading to your smartphone or tablet via Bluetooth, where your Blood Alcohol Content (BAC) estimate is displayed.

Alcohol and Its Effects on the Human Body

When alcohol is consumed, it is absorbed from the mouth, throat, stomach, and intestines into the bloodstream. Blood carries the alcohol throughout the body - including to the lungs. As alcohol-laden blood moves across the membranes of the lung's air sacs (alveoli), it permeates the breath. The concentration of the alcohol in the alveolar air is directly related to the concentration of alcohol in the blood.

The ratio of breath alcohol to blood alcohol is generally estimated to be 2,100:1. Therefore, every 2,100 ml of alveolar air contains approximately the same amount of alcohol as 1 ml of blood. The breathalyzer uses this ratio in order to make an accurate estimate of your BAC.

Alcohol is a Drug

Alcohol is the chemical (ethanol or ethyl alcohol) resulting from the fermentation of grapes or grain. Alcohol is absorbed directly into your bloodstream. From your bloodstream, the tissues in your body absorb the alcohol. Your brain is a tissue made up of a large concentration of fluids and absorbs a large amount of any alcohol you drink. Your liver eliminates the absorbed alcohol at its own rate and nothing you eat or drink can speed up the process. Your liver does this by oxidizing the alcohol (converting it into water and carbon dioxide). Coffee, food or any other "cure" will not sober you up. Only time will do that.

How does alcohol affect my body?

Alcohol is a depressant. It has a relaxing effect on the muscles in your body. As the muscles of your eyes relax and lose focus, your eyesight becomes fuzzy and you may experience double vision. Brain activity is slowed. Your judgment, reflexes, and coordination are all negatively affected.

Some vision impairment can occur when you have been drinking, including:

- Narrowing of your field of vision
- Reduction in your depth perception
- Decreased ability to see in darkness
- Increased sensitivity to glare
- Delay in adjusting to different light levels

Mental impairment can also occur when you have been drinking, including:

- Reduced awareness of danger
- Becoming overly confident and reckless
- Difficulty in making decisions
- Reduction in balance
- Slowed reflexes
- Impaired judgment

How does alcohol affect my driving?

We can't emphasize enough how dangerous it is for you to drink and drive. Your vision and your brain are the most important factors to driving safely. If you jeopardize either one by drinking and driving, you are likely to be involved in a serious or fatal collision. You may kill yourself, your best friends, or someone else's family.

DOSE SPECIFIC EFFECTS OF ALCOHOL*

BAC	Dose-Specific Effects
0.02-0.03%	Slight euphoria. Loss of shyness. Depressant effects are not apparent. Impairment possible in some individuals.
0.04-0.06%	Feeling of well-being, relaxation, lower inhibitions and sensation of warmth. Euphoria. Some minor impairment of reasoning and memory. **Lowering of caution. Driving skills may be impaired at this level of intoxication.**
0.07-0.09%	Euphoria. Slight impairment of balance, speech, vision, reaction time, and hearing. Judgment and self-control are reduced. Caution, reason and memory are impaired. **Driving skills are always impaired at this level of intoxication and higher.**

BAC	Dose-Specific Effects
0.10-0.12%	Heightened euphoria. Significant impairment of motor coordination and loss of good judgment. Speech may be slurred. Balance, vision, reaction time and hearing will be impaired.
0.13-0.15%	Gross motor impairment and lack of physical control. Blurred vision and major loss of balance. Euphoria is reduced and dysphoria (anxiety, restlessness) begins to appear.
0.16-0.20%	Dysphoria predominates. Nausea may appear.
0.25%	Need for assistance in walking. Total mental confusion. Dysphoria with nausea and some vomiting.
0.30%	Loss of consciousness.
0.40% +	Onset of coma. Possible death due to respiratory arrest**.

* The effects of alcohol intoxication are greatly influenced by individual variations among users. Some users will be intoxicated at a much lower BAC than shown on the previous page.

** Death can occur at a lower BAC in some individuals.

The generally accepted legal standard for alcohol intoxication in the United States is 0.08%. However, your driving skills can be impaired at any level above 0.00% BAC. It is never safe to drink any amount of alcohol and drive.

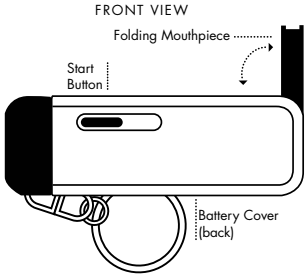
PREPARATION

Step 1. Download the BACtrack App from the App Store or Google Play onto your mobile device. If you have trouble finding it, there are links to the app download pages from www.bactrack.com/mobile. Note: both BACtrack Mobile and BACtrack Vio use the same BACtrack app.

Step 2. Go to Settings on your mobile device and make sure Bluetooth® is switched on. Connecting takes place within the BACtrack App, but Bluetooth® must be switched on in Settings first.

Step 3. Press and hold the Power Button on your BACtrack for two seconds, then release, powering it on and allowing it to be found. No cords or adapters are needed. Open the app from the home screen. The BACtrack will connect automatically.

COMPONENTS DIAGRAM



OPERATION

Test subjects should wait 20 minutes after eating, drinking, or smoking before blowing into the BACtrack Breathalyzer. Failure to wait 20 minutes can provide inaccurate test results and damage the sensor.

Step 1. If you would like to use a mouthpiece, attach it to the breathalyzer. Note: Using a mouthpiece is optional and does not affect the performance of the breathalyzer; however it does provide a hygienic way to test others.

Step 2. On your mobile device, press the Breathalyzer image to initiate the testing process. While the sensor in the Breathalyzer warms up, you have the opportunity to "Guess Your BAC." This is optional and will not affect your final reading. Click the button to skip.

Step 3. When the screen on your mobile device reads, “Blow now,” take a deep breath, and blow into your BACtrack continuously until all the bars are illuminated. It should take about five seconds. The app will tell you when it has captured an adequate sample.

Step 4. Once your BACtrack has analyzed the sample, it will communicate the reading to your mobile device and the BAC value will display.

Step 5. When finished testing, hold the Power Button on your BACtrack for 2 seconds to turn it off.

Follow the instructions in your BACtrack App to track and understand your BAC. Keep your app updated as we continuously add new features and options.

SPECIFICATIONS

Dimensions	0.97 x 2.85 x 0.59 inches
Weight	2 oz (56g)
Sensor Technology	MicroCheck®
Warm up Time	About 15 seconds
Blowing Time	5 seconds
Power Supply	1 AAA Alkaline battery
BAC Range	0.00 – 0.16%
Operating Temperature.	32° - 96.8°F (0 - 36°C)
Warranty	1 year limited warranty

PRECAUTIONS

1. Wait at least 20 minutes after drinking, eating or smoking before testing. Not observing this waiting period can cause inaccurate readings and damage the sensor.
2. Do not test in areas with strong winds, smoke.
3. Send your breathalyzer in for periodic calibration service as required. (See Verification and Calibration.)
4. Your BACtrack is designed to be used in a temperature range of 32-96.8 F (0-36 C).
5. Avoid testing in the presence of any substances that contain methyl alcohol, isopropyl alcohol or acetone. These substances may interfere with the results of the test.
6. You cannot use the results of this product in court.
7. Do not use your BACtrack as a tool to determine whether you should operate a motor vehicle or equipment, or perform any other dangerous act.
8. Do not drink and drive. Always have a designated driver when alcohol is being consumed.

REGULAR USE

Your BACtrack is a sensitive instrument. Unlike other electronic devices, your breathalyzer shouldn't be ignored for long periods of time. The sensor inside it is delicate and can dry out if left unused for too long. In order to keep it in good working condition, we recommend that you blow into it at least once a month, even if you don't plan on using it. Breathing into the unit regularly keeps the sensor moist and in good working order. Sensors that dry out can sometimes require more frequent calibration.

VERIFICATION AND CALIBRATION

Calibration is a normal part of owning and operating a breathalyzer. Known alcohol concentrations are passed through the sensor to set baseline values for testing. When using your breathalyzer, the unit compares your breath samples to these baseline values.

The accuracy of breath alcohol testers can fluctuate after six to twelve months of normal use, depending on the number of tests performed and operating conditions. If this product is providing inconsistent test results, is not providing any test results, or provides unusually high or low test results, the product should be recalibrated immediately by a trained professional.

Calibration is a normal part of owning and operating a professional level breathalyzer. BACtrack recommends that you calibrate your breathalyzer at least every 6-12 months, depending on the performance you observe and require. If the product is used every day, it may need to be recalibrated more frequently.

CALIBRATION INSTRUCTIONS

Please visit http://support.bactrack.com or call 415-693-9756 for information on how to get your BACtrack Breathalyzer recalibrated.

All breathalyzer calibrations are performed at our facility in San Francisco. During recalibration, a professional technician will reset the sensor baseline values and also perform a full diagnostic check to ensure the accuracy and reliability of the product.

ONE YEAR-LIMITED WARRANTY

BACtrack (a division of KHN Solutions, Inc.) honors limited warranty obligations on this product as described herein:

KHN Solutions warrants this product against defects in materials and workmanship under normal use for a period of ONE (1) YEAR from the date of retail purchase by the original end-user purchaser ("Warranty Period"). Except as provided in the preceding sentence or applicable law, KHN Solutions provides this product "as is." If a defect arises and a valid claim is received by KHN Solutions within the Warranty Period,

at its option, KHN Solutions will either (1) repair the product, (2) exchange the product with a product that is new or which has been manufactured from new or serviceable used parts and is at least functionally equivalent to the original product, or (3) refund the purchase price of the product. When a refund is given, the product for which the refund is provided must be returned to KHN Solutions and becomes KHN Solutions' property. This warranty is limited to the original end-user purchaser and is not transferable to, or enforceable by, any subsequent owner.

Exclusions, Limitations, and Disclaimers

KHN Solutions makes no warranties, express or implied, as to the ability of this product to determine whether, or the extent to which, a test subject's mental or physical functioning, or judgment, may be impaired by blood alcohol including whether the test subject is intoxicated under any definition of that word. KHN Solutions expressly disclaims any liability for direct, indirect, incidental, special, or consequential damages of any nature under any legal theory. Any act or failure to act based on a reading from this product shall be at the test subject's or user's own risk. KHN Solutions assumes no responsibility for consequences to or of test subjects who use this product and later are shown to have been under the influence of alcohol or to have had their judgment or any mental or bodily function impaired by alcohol. Correlation between breath alcohol content and blood

alcohol concentration depends on many variables, including environmental factors (such as air quality, wind, humidity, temperature, etc.) and health conditions of the test subject. A low BAC reading does not mean that the test subject's physical or mental performance or judgment (including reaction times) can respond to an emergency.
The concentration of alcohol in the blood of a test subject cannot be exactly determined by using a breath alcohol screening product.

KHN Solutions does not warrant that the operation of the product will be error-free. KHN Solutions is not responsible for any consequences arising from failure to follow instructions or relating to the product's use. This warranty does not apply: (a) to consequences caused by accident, abuse, tampering, misuse, flood, fire, earthquake or other external causes; (b) to consequences caused by operating the product outside the permitted or intended uses described by KHN Solutions; (c) to consequences caused by service performed by anyone who is not a representative of KHN Solutions or a KHN Solutions Authorized Service Provider; or (d) to a product or part that has been modified to alter functionality or capability without the written permission of KHN Solutions.
TO THE EXTENT PERMITTED BY LAW, THIS WARRANTY AND THE REMEDIES SET FORTH ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, REMEDIES AND CONDITIONS, WHETHER ORAL OR WRITTEN, STATUTORY, EXPRESS OR IMPLIED. AS PERMITTED BY APPLICABLE LAW, KHN SOLUTIONS SPECIFICALLY DISCLAIMS

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No KHN Solutions reseller, agent, or employee is authorized to make any modification, extension, or addition to this warranty. If any term is held to be illegal or unenforceable, the legality or enforceability of the remaining terms shall not be affected or impaired.

EXCEPT AS PROVIDED IN THIS WARRANTY AND TO THE MAXIMUM EXTENT PERMITTED BY LAW, KHN SOLUTIONS IS NOT RESPONSIBLE FOR DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES UNDER ANY LEGAL THEORY, INCLUDING BUT NOT LIMITED TO LOSS OF USE; LOSS OF REVENUE OR INCOME; LOSS OF ACTUAL OR ANTICIPATED PROFITS (INCLUDING LOSS OF PROFITS FROM A CONTRACT); LOSS OF THE USE OF MONEY; LOSS OF ANTICIPATED SAVINGS; LOSS OF BUSINESS; LOSS OF OPPORTUNITY; LOSS OF GOODWILL, OR LOSS OF REPUTATION.

This Breath Alcohol Tester is intended to measure alcohol in human breath. Readings obtained by this device are used in the diagnosis of alcohol intoxication.
Some countries, states and provinces do not allow the exclusion or limitation of incidental or consequential damages or allow limitations on how long an implied warranty or condition may last, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights that vary by country, state or province. This limited Warranty is governed by and construed under the laws of the country in which the product purchase took place.

Obtaining Warranty Service

Please be sure to read this instruction manual carefully if you believe your product is not operating properly. If you still feel that your product requires warranty service, please follow these instructions:
Obtain a Return Authorization (RA) number by emailing BACtrack through the online form found at: www.bactrack.com/support

When shipping the product back to BACtrack / KHN Solutions, please package the product carefully and ship using a major carrier (UPS, FedEx, USPS, etc). To ensure proper credit for a returned item, be sure to obtain a delivery confirmation on the return shipment. The customer is responsible for all return shipping charges. Include the following information with your returned product:

- Your Return Authorization number
- Name, address, and phone number as stated at the time of order
- A copy of your original sales receipt, if you have it

DO NOT DRINK AND DRIVE

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